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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,553	08/13/2001	Paul Augustinus Peter Kaufholz	NL 000433	7134

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/928,553	Applicant(s) KAUFHOLZ, PAUL AUGUSTINUS PETER	
	Examiner James S. Wozniak	Art Unit 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-17 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the office action from 2/7/2005, the applicant has submitted a request for continued examination, filed 2/28/2005, amending Claims 7 and 15, while arguing to traverse the art rejection based on the limitation regarding driving echo canceling facilities to combine their forces (*Amendment, Page 6*). The applicant's arguments have been fully considered but are moot with respect to the new grounds of rejection in view of Finn et al (*U.S. Patent: 6,505,057*) and Stammmler et al (*U.S. Patent: 6,839,670*).

2. Based on the amendments to Claim 15, the examiner has withdrawn the previous 35 U.S.C. 112, second paragraph rejection directed towards a lack of antecedent basis.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 5-8, and 12-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Finn et al (*U.S. Patent: 6,505,057*) in view of Stammmler et al (*U.S. Patent: 6,839,670*).

With respect to **Claims 1 and 8**, Finn discloses:

In the presence of a plural and functionally separate speech recognizing facilities and echo canceling facilities, driving the echo canceling facilities to combine their forces by one or more thereof for canceling one or more mutually unique cancelable speech entities and combining such cancelled entities for overall non-recognition by the system (*Col. 16, Line 1-Col. 18, Line 6, and Fig. 9A and suggested system use with voice recognition, Col. 3, Lines 17-23*).

Although Finn suggests system use with a voice recognition system, the system is not explicitly disclosed, however such systems utilizing echo compensation are well known in the art as is evidenced by Stammmler (speech control system, Col. 19, Lines 23-67; echo subtraction, Col. 7, Lines 34-39).

Finn and Stammmler are analogous art because they are from a similar field of endeavor in voice processing systems utilizing echo compensation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Finn with a specific speech recognition system as taught by Stammmler in order to implement a specific system for convenient, hands-free device control using speech (Stammmler, Col. 2, Lines 19-24) capable of canceling echoes at each microphone input as taught by Finn to produce high quality speech for recognition.

With respect to **Claims 5 and 12**, Stammmler further shows:

Combining operates by centralizing the echo canceling facilities and feeding various speech recognizing facilities in a distributed manner (*system having an echo compensator and two speech recognition means, Fig. 2*).

With respect to **Claims 6 and 13**, Stammmler additionally shows:

The combining operates by centralizing the echo canceling facilities and speech recognizing facilities in a joint control facility (*system having speech recognizers and echo compensation means, Fig. 2*).

With respect to **Claims 7 and 14**, Stammmler shows:

The combining operates by arranging selected echo canceling facilities in a centralized control device and feeding selected speech recognizing facilities in parallel (*Fig. 2*).

With respect to **Claim 15**, Finn teaches multiple connected echo canceling facilities between multiple speech inputs and outputs, while Stammmler teaches a microphone and speaker between speech recognition and echo cancellation facilities, as applied to Claims 1 and 8.

With respect to **Claim 16**, Stammmler teaches speech dialog interruption means (*Col. 13, Lines 22-45*).

With respect to **Claim 17**, Stammmler teaches the operation of a speech recognition system and device control utilizing a microphone (*Col. 19, Lines 23-67*).

5. **Claims 2-4 and 9-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Finn et al in view of Stammmler et al, and further in view of Knittle et al (*U.S. Patent: 5,761,638*).

With respect to **Claims 2 and 9**, Finn in view of Stammmler teaches the echo cancellation and speech recognizing facilities, as applied to Claim 1. Finn in view of Stammmler do not specifically disclose an embodiment in which the echo cancellers are arranged in series, however Knittle teaches such an arrangement (*Col. 10, Lines 4-25*).

Finn, Stammmler, and Knittle are analogous art because they are from a similar field of endeavor in voice processing systems utilizing echo compensation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Finn in view of Stammmler with the series arrangement of echo cancellers as taught by Knittle in order to further improve echo cancellation by arranging echo cancellers in series to cancel both near and far field echo (*Knittle, Col. 10, Lines 4-25*).

With respect to **Claims 3 and 10**, Knittle additionally discloses:

The series arrangement feeds the speech recognizing facility in a centralized manner (*Col. 10, Lines 4-25, and Fig. 1*).

With respect to **Claims 4 and 11**, Knittle teaches the series arrangement of echo cancellers, while Stammmler teaches feeding the echo cancelled speech signal to multiple speech recognizers as applied to Claims 5 and 12.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Ibaraki et al (*U.S. Patent: 6,665,645*)- teaches echo canceling and speech recognizing facilities.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632

Art Unit: 2655

and email is James.Wozniak@uspto.gov. The examiner can normally be reached on Mondays-Fridays, 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached at (703) 305-4827. The fax/phone number for the Technology Center 2600 where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 306-0377.

James S. Wozniak
4/4/2005



DAVID L. OMETZ
PRIMARY EXAMINER